

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
15 December 2005 (15.12.2005)

PCT

(10) International Publication Number
WO 2005/118441 A1

(51) International Patent Classification⁷: **B65G 57/28**,
65/23

(21) International Application Number:
PCT/US2004/016730

(22) International Filing Date: 27 May 2004 (27.05.2004)

(25) Filing Language: English

(26) Publication Language: English

(71) Applicant (for all designated States except US): **FRA-
ZIER INDUSTRIAL COMPANY** [US/US]; Fairview
Avenue, P.O. Box F, Long Valley, NJ 07853 (US).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **CLAPP, Daniel**
[US/US]; 506 Townsbury Road, Great Meadow, NJ 07838
(US).

(74) Agents: **DILWORTH, Peter, G.** et al.; Dilworth & Bar-
rese, LLP, 333 Earle Ovington Boulevard, Uniondale, NY
11553 (US).

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,

AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

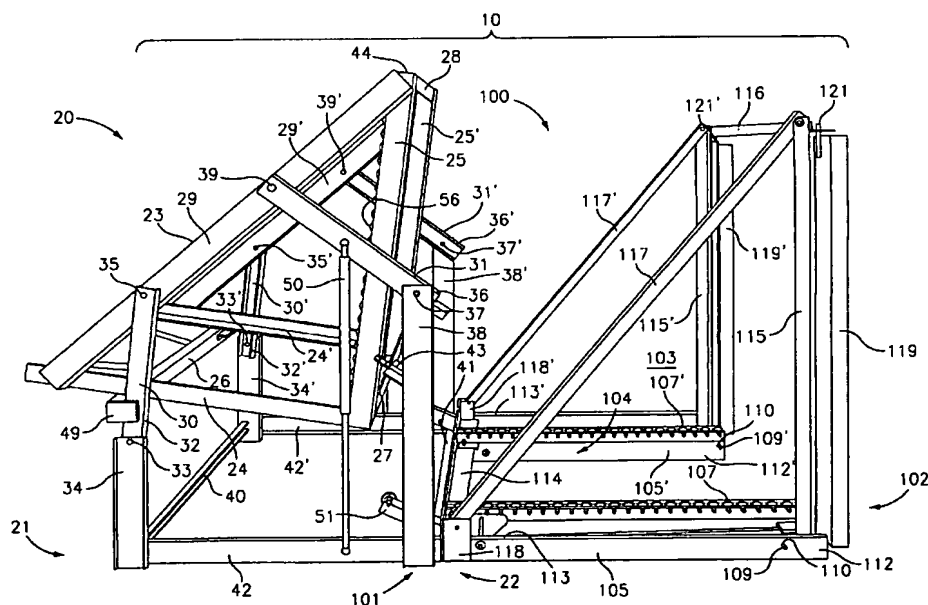
(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

- as to the identity of the inventor (Rule 4.17(i)) for all des-
ignations
- as to applicant's entitlement to apply for and be granted
a patent (Rule 4.17(ii)) for the following designations AE,
AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ,

[Continued on next page]

(54) Title: **PALLET STACKING AND STAGING SYSTEM**



(57) Abstract: An empty pallet stacking unit (20) having a pallet loading and stacking end (21) and a stacked pallet discharge end (22) features a pallet hopper (23) which is reversibly moveable from a pallet loading and stacking position to a stacked pallet discharging position, the pallet hopper (23) being pivotally linked to a fixed support (42) through a 4-bar linkage (30,30',31,31'). Optionally, the empty pallet stacking unit (20) may be cooperatively coupled to a stacked pallet staging unit (100).

WO 2005/118441 A1